

ABSTRACT

A wide-angle diffuser for a combustion turbine system having a turbine provides multiple expanding flow paths for the turbine exhaust. Each flow path is arranged to have the ideal diffusion angle for the given flow thus allowing for complete and efficient expansion of the turbine exhaust with a shorter length diffuser. An inner tube having an ideal diffusion angle is surrounded by a plurality of frustoconical tubes having larger opening angles producing a plurality of interstitial flow paths.

T:\clienta\031383\9041\A0677616.2